

## ABSTRACT

An organic nitrogen compound with a boiling point lower than a 50% distillation temperature of feed oil is contacted with hydrocracking catalyst as pre-treatment. The hydrocracking catalyst is contacted with the feed oil and hydrogen to perform hydrocracking and obtain a hydrocarbon with a boiling point lower than the feed oil. Moreover, pre-treatment can also be performed by contacting hydrocracking catalyst with a petroleum fraction that has a 95% distillation temperature lower than the 50% distillation temperature of the feed oil and that contains organic nitrogen compound. As a result, the initial deactivation rate of the hydrocracking catalyst can be slowed and the middle distillate yield can be improved, and further, activity after initial deactivation can be improved.

RECEIVED AUG 19 2002